DEFENSE INFORMATION SYSTEMS AGENCY
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IN REPLY
REFER TO: Joint Interoperability Test Command (JTE)

MEMORANDUM FOR DISTRIBUTION **5 Aug 11**

SUBJECT: Extension of the Special Interoperability Test Certification of the T-Metrics TM-2000 Multi-Purpose Automatic Call Distributor (ACD) Release Version (v) 5.0

References: (a) DoD Directive 4630.5, "Interoperability and Supportability of Information Technology (IT) and National Security Systems (NSS)," 5 May 2004
(b) CJCSI 6212.01D, "Interoperability and Supportability of Information Technology and National Security Systems," 8 March 2006
(c) through (f), see Enclosure 1

1. References (a) and (b) establish the Defense Information Systems Agency (DISA), Joint Interoperability Test Command (JITC), as the responsible organization for interoperability test certification.

2. The T-Metrics TM-2000 Multi-Purpose ACD with Release v5.0 is hereinafter referred to as the System Under Test (SUT). The SUT met the interface and functional requirements and is certified for joint use within the Defense Switched Network (DSN). The SUT is certified specifically with switching systems listed in Table 1 that are listed on the Unified Capabilities (UC) Approved Product List (APL) with their associated interfaces. The SUT met the interface and functional requirements for an ACD system as set forth in Reference (c). No other configurations, features, or functions, except those cited within this report, are certified by the JITC. This certification expires upon changes that affect interoperability, but no later than three years from the date of this memorandum.

Table 1. SUT Certified Switching Systems

Switch Name (See note.)	Interface	Remarks
Avaya MSL-100	Digital Proprietary	The SUT interfaces to this switch via proprietary M5216 MBS lines.
Avaya CS2100	Digital Proprietary	The SUT interfaces to this switch via proprietary M5216 MBS lines.
Avaya DSN CS1000M Single Group, DSN CS1000M Multi Group	Digital Proprietary	The SUT interfaces to this switch via proprietary M2616 MBS lines.
Avaya DSN M1 Option 61C, DSN M1 Option 81C	Digital Proprietary	The SUT interfaces to this switch via proprietary M2616 MBS lines.
Avaya DSN CS1000M Cabinet, DSN CS1000M Chassis	Digital Proprietary	The SUT interfaces to this switch via proprietary M2616 MBS lines.
Avaya DSN Option 11C Cabinet, DSN Option 11C Chassis	Digital Proprietary	The SUT interfaces to this switch via proprietary M2616 MBS lines.
Avaya Succession DSN 1000M Single Group, Half Group, and Multi Group	Digital Proprietary	The SUT interfaces to this switch via proprietary M2616 MBS lines.

Enclosure

Table 1. SUT Certified Switching Systems (continued)

Switch Name (See note.)	Interface	Remarks
Avaya Succession DSN 1000M Cabinet, DSN 1000M Chassis, DSN 1000M	Digital Proprietary	The SUT interfaces to this switch via proprietary M2616 MBS lines.
Avaya Succession DSN Options 11C, 61C, and 81C	Digital Proprietary	The SUT interfaces to this switch via proprietary M2616 MBS lines.
Avaya M1 Options 11C, 61C, and 81C	Digital Proprietary	The SUT interfaces to this switch via proprietary M2616 MBS lines.
Cisco CallManager	100BaseT	The CCM is not certified for standalone use with the SUT. The CCM must connect to one of the Avaya switches in this table through a T1 PRI interface and to the SUT through a 100BaseT interface to the RASM.
Alcatel-Lucent 5ESS, CDX, and VCDX	ISDN BRI (5E Custom) Analog	
Avaya S8720, S8710, S8700	Digital Proprietary	The SUT interfaces to this switch via proprietary 6416D Digital lines.

NOTE: Those switching systems bolded and underlined were tested specifically with the SUT by JITC. The other switching systems were not tested with the SUT; however, these systems were previously tested and certified by JITC with the same serial interfaces and JITC analysis determined them to be functionally identical for interoperability certification purposes and they are also certified with the SUT.

LEGEND:

5E	5ESSS	M1	Meridian 1
5ESS	Class 5 Electronic Switching System	Mbps	Megabits per second
802.3	Standard for carrier sense multiple access with collision detection at 10 Mbps	MBS	Meridian Business Set
		MSL	Meridian Switching Load
CDX	Compact Digital Exchange	RASM	Remote Agent Status Module
CS	Communication Server	SUT	System Under Test
DSN	Defense Switched Network	VCDX	Very Compact Digital Exchange
JITC	Joint Interoperability Test Command		

3. The extension of this certification is based upon Desktop Review (DTR) 4. The original certification is based on interoperability testing conducted by JITC, review of the vendor's Letters of Compliance (LoC), and Defense Information Assurance (IA)/Security Accreditation Working Group (DSAWG) accreditation. Interoperability testing was conducted by the JITC at the Global Information Grid Network Test Facility, Fort Huachuca, Arizona, from 7 through 11 April 2008. Review of the vendor's LoC was completed on 5 May 2008. The SUT supports the same software, interfaces, and functionality as when it was previously tested. The only difference is that the SUT now supports either Microsoft XP or Microsoft Windows Vista operating system platform. A review of the SUT and comparison with the new requirements in References (c) and (e) was conducted on 15 December 2009 to determine the SUT was certified for interoperability within the DSN without additional interoperability testing. DSAWG granted accreditation on 31 March 2010 based on the security testing completed by DISA-led IA test teams and published in a separate report, Reference (f). This DTR requests to add the Avaya S8720, S8710, and S8700 digital switching systems, which have a digital proprietary 6416D line interface that is compatible with the SUT. The SUT was tested with the Avaya S8720 during a Verification and Validation (V&V) from 21 through 25 March 2011. The Avaya S8700 and S8710 digital proprietary interfaces utilize the same digital proprietary 6416D line interface cards as the S8720. Analysis by JITC determined that the functionality of the S8700 and the 8710 are identical to the S8720 and therefore, JITC approves this DTR. The IA posture was not changed for this DTR, so the original DSAWG accreditation is still valid for this DTR request, but no later than three years from the date of the original memorandum (31 March 2010).

4. The functional requirements used to evaluate the interoperability of the SUT and the interoperability statuses are indicated in Table 2. Figure 1 depicts the SUT test configuration with the Avaya S8720.

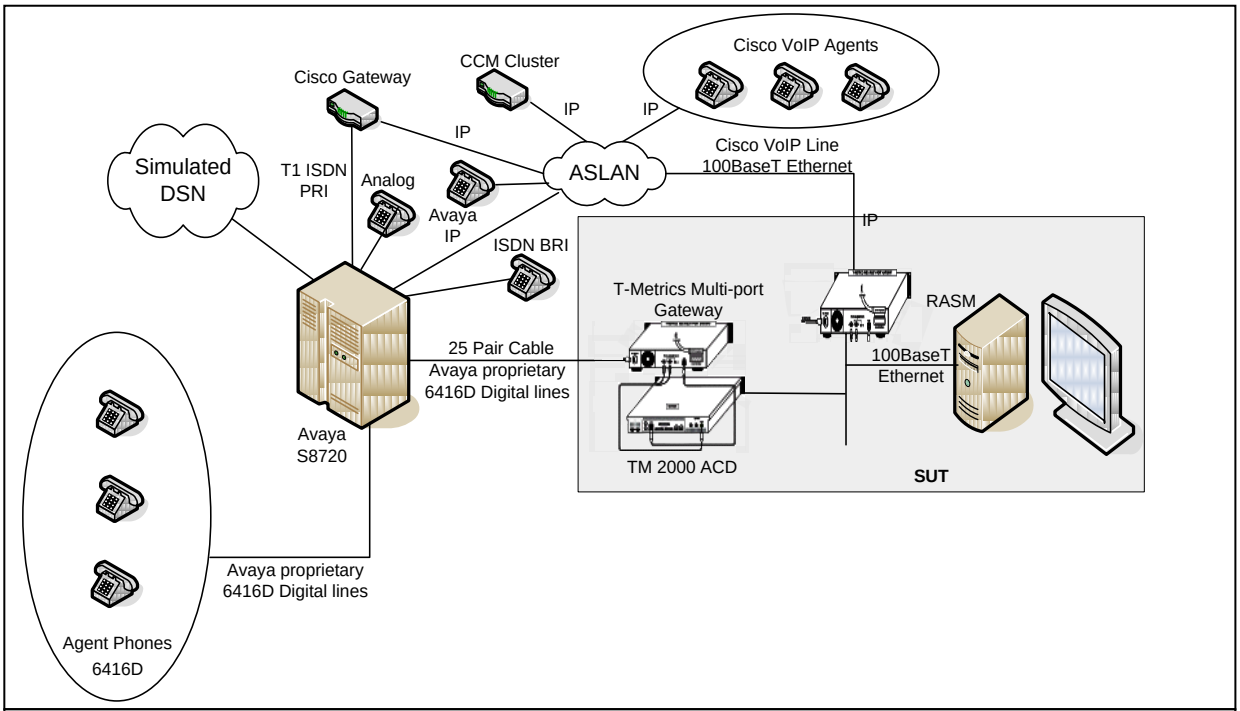
Table 2. SUT Functional Requirements and Interoperability Status

Interface	Critical	Certified	Functional Requirements	Met	UCR Paragraph
CS2100 2-Wire Proprietary Interface: M5216 MBS line	No[1]	Yes	Precedence Call Diversion (R)	Met	5.2.2.3
			FCC Part 15/Part 68 and ACTA (R)	Met	5.2.12.3.5
			Auto Answer mode settable to more than the equivalency of 4 ROUTINE rings (C)	Met	5.2.12.3.5
			MLPP precedence call alerting (C)	Met	5.2.12.3.5
			DTMF Outpulsing in accordance with GR-506-CORE (C)	Met	5.2.12.3.5, 5.2.4.4.2
			Conformance to TIA/EIA-470-B (C)	Met	5.2.12.3.5
CS1000M 2-Wire Proprietary Interface: M2616 MBS line	No[1]	Yes	Precedence Call Diversion (R)	Met	5.2.2.3
			FCC Part 15/Part 68 and ACTA (R)	Met	5.2.12.3.5
			Auto Answer mode settable to more than the equivalency of 4 ROUTINE rings (C)	Met	5.2.12.3.5
			MLPP precedence call alerting (C)	Met	5.2.12.3.5
			DTMF Outpulsing in accordance with GR-506-CORE (C)	Met	5.2.12.3.5, 5.2.4.4.2
			Conformance to TIA/EIA-470-B (C)	Met	5.2.12.3.5
Cisco 100BaseT (See note 2.)	No[1]	Yes	Precedence Call Diversion (R)	Met	5.2.2.3
			Auto Answer mode settable to more than the equivalency of 4 ROUTINE rings (C)	Met	5.2.12.3.5
			MLPP precedence call alerting (C)	Met	5.2.12.3.5
ISDN BRI (5E Custom) Analog	No[1]	Yes	Precedence Call Diversion (R)	Met	5.2.2.3
			FCC Part 15/Part 68 and ACTA (R)	Met	5.2.12.3.5
			Auto Answer mode settable to more than the equivalency of 4 ROUTINE rings (C)	Met	5.2.12.3.5
			MLPP precedence call alerting (C)	Met	5.2.12.3.5
			DTMF Outpulsing in accordance with GR-506-CORE (C)	Met	5.2.12.3.5, 5.2.4.4.2
			Conformance to TIA/EIA-470-B (C)	Met	5.2.12.3.5
Avaya Digital Proprietary (6416D)	No[1]	Yes	Precedence Call Diversion (R)	Met	5.2.2.3
			FCC Part 15/Part 68 and ACTA (R)	Met	5.2.12.3.5
			Auto Answer mode settable to more than the equivalency of 4 ROUTINE rings (C)	Met	5.2.12.3.5
			MLPP precedence call alerting (C)	Met	5.2.12.3.5
			DTMF Outpulsing in accordance with GR-506-CORE (C)	Met	5.2.12.3.5, 5.2.4.4.2
			Conformance to TIA/EIA-470-B (C)	Met	5.2.12.3.5
	Yes	Yes	Security (R)	See note 3.	3.2.3, 3.2.5, and 5.4.6.1

NOTES:
1 The ACD requirements can be met via one of the following interfaces: 2-Wire Analog, 2-Wire Digital, 4-Wire Digital, PCM-24, PCM-30, or IP.
2 This interface is not required to support IPv6 in accordance with Reference (e).
3 Security is tested by DISA-led Information Assurance test teams and published in a separate report, Reference (g).

Table 2. SUT Functional Requirements and Interoperability Status (continued)

LEGEND:			
5E	5ESSS	IP	Internet Protocol
5ESS	Class 5 Electronic Switching System	IPv6	Internet Protocol version 6
100BaseT	100 Mbps (Baseband Operation, Twisted Pair) Ethernet	LSSGR	Local Access and Transport Area (LATA) Switching Systems Generic Requirements
ACTA	Administrative Council for Terminal Attachments	Mbps	Megabits per second
ACD	Automated Call Distributor	MBS	Meridian Business Set
C	Conditional	MLPP	Multi-Level Precedence and Preemption
CDX	Compact Digital Exchange	PCM-24	Pulse Code Modulation - 24 Channels
CS	Communication Server	PCM-30	Pulse Code Modulation - 30 Channels
DISA	Defense Information Systems Agency	R	Required
DTMF	Dual Tone Multi-Frequency	SUT	System Under Test
EIA	Electronic Industries Alliance	TIA	Telecommunications Industry Association
FCC	Federal Communications Commission	TIA/EIA-470-B	Performance and Compatibility Requirements for Telephone Sets with Loop Signaling
GR	Generic Requirement	UCR	Unified Capabilities Requirements
GR-506-CORE	LSSGR: Signaling for Analog Interfaces	VCDX	Very Compact Digital Exchange



LEGEND:			
100BaseT	10/100 Mbps (Baseband Operation, Twisted Pair) Ethernet	IP	Internet Protocol
ACD	Automatic Call Distributor	PRI	Primary Rate Interface
ASLAN	Assured Services Local Area Network	ISDN	Integrated Services Digital Network
BRI	Basic Rate Interface	Mbps	Megabits per second
CCM	Cisco CallManager	RASM	Remote Agent Status Module
CS	Communication Server	SUT	System Under Test
DSN	Defense Switched Network	T1	Digital Transmission Link Level 1 (1.544 Mbps)
		VoIP	Voice over Internet Protocol

Figure 1. Avaya S8720 Test Configuration

5. No detailed test report was developed in accordance with the Program Manager's request. JITC distributes interoperability information via the JITC Electronic Report Distribution (ERD) system, which uses Unclassified-But-Sensitive Internet Protocol Router Network (NIPRNet) e-mail. More comprehensive interoperability status information is available via the JITC System Tracking Program (STP). The STP is accessible by .mil/gov users on the NIPRNet at https://stp.fhu.disa.mil. Test reports, lessons learned, and related testing documents and references are on the JITC Joint Interoperability Tool (JIT) at https://jit.fhu.disa.mil (NIPRNet), or http://199.208.204.226 (SIPRNet). Information related to DSN testing is on the Telecom Switched Services Interoperability (TSSI) website at http://jitc.fhu.disa.mil/tssi. Due to the sensitivity of the information, the Information Assurance Accreditation Package (IAAP) that contains the approved configuration and deployment guide must be requested directly through government civilian or uniformed military personnel from the Unified Capabilities Certification Office (UCCO), e-mail: ucco@disa.mil.

6. The JITC point of contact is Mr. Khoa Hoang, DSN 879-4376, commercial (520) 538-4376, FAX DSN 538-4347, or e-mail to khoa.hoang@disa.mil. The JITC's mailing address is P.O. Box 12798, Fort Huachuca, AZ 85670-2798. The tracking number for the SUT is 0923904.

FOR THE COMMANDER:

Enclosure a/s

for BRADLEY A. CLARK
Chief
Battlespace Communications Portfolio

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Defense Information Systems Agency, GS23

ADDITIONAL REFERENCES

(c) Office of the Assistant Secretary of Defense, "Department of Defense Unified Capabilities Requirements 2008," 22 January 2009
(d) Joint Interoperability Test Command, "Defense Switched Network Generic Switch Test Plan (GSTP), Change 2," 2 October 2006
(e) Office of the Secretary of Defense, "Interim Unified Capabilities (UC) IPv6 Rules of Engagement (ROE)," 31 July 2009
(f) Joint Interoperability Test Command, "Information Assurance (IA) Assessment of T-Metrics TM-2000 Multi-Purpose Automated Call Distributor (ACD) Release Version (v) 5.0 (Tracking Number 0923904)," 31 March 2010